



County of San Diego Health Update

Reference Materials

**County of San Diego
Health and Human Services Agency
Public Health Services**

April 20, 2009

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Three behaviors lead to four diseases responsible for 50% of deaths worldwide.	
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Data Sources:

Death Data: California Department of Public Health, Center for Health Statistics, Death Statistical Master Files; SANDAG January 1 population estimates (2005-07 estimates released 2008). Prepared by County of San Diego, Health & Human Services Agency, Public Health Services, Community Epidemiology Branch, 03/11/2009.

Infant Mortality Data: State of California, Department of Health Services, Center for Health Statistics, Birth and Death Statistical Master Files. Prepared by County of San Diego, Health & Human Services Agency, Maternal, Child & Family Health Services (MCFHS).

Hospitalization Data: California Office of Statewide Health Planning & Development (OSHPD) Hospital Discharge Data 2001-2005; SANDAG January 1 population estimates 2001-2003 (rel 7/2004), 2004 (rel 11/2005), and 2005 (rel 09/2006). Prepared by Community Epidemiology 5/30/2007.

Obesity Data: California Health Interview Survey (CHIS), 2001-2007.

3

BEHAVIORS

**TOBACCO USE
POOR DIET
NO EXERCISE**

4

DISEASES

**HEART DISEASE
TYPE 2 DIABETES
LUNG DISEASE
CANCER**

50

PERCENT OF DEATHS

LEADING CAUSES OF DEATH AMONG SAN DIEGO COUNTY RESIDENTS BY HHSA REGION[†], 2007

Number and Percent of Deaths

COUNTY-WIDE RANK IN 2007 ^a	CAUSE OF DEATH ^b	REGION [†]											
		N. Coastal		N. Central		Central		South		East		N. Inland	
		number of deaths	%	number of deaths	%	number of deaths	%	number of deaths	%	number of deaths	%	number of deaths	%
1	Malignant neoplasms	831	26.4	872	26.5	637	23.9	624	23.8	859	24.0	953	26.7
2	Diseases of heart	801	25.5	790	24.0	663	24.9	711	27.1	903	25.2	821	23.0
3	Cerebrovascular diseases	195	6.2	185	5.6	151	5.7	157	6.0	199	5.6	220	6.2
4	COPD/Chronic lower respiratory diseases	193	6.1	150	4.6	117	4.4	121	4.6	247	6.9	191	5.4
5	Alzheimer's disease	173	5.5	229	7.0	76	2.9	83	3.2	203	5.7	252	7.1
6	Accidents (unintentional injuries)	163	5.2	158	4.8	148	5.6	121	4.6	155	4.3	186	5.2
7	Diabetes mellitus	71	2.3	74	2.2	84	3.2	99	3.8	115	3.2	74	2.1
8	Intentional self-harm (suicide)	59	1.9	60	1.8	56	2.1	31	1.2	78	2.2	61	1.7
9	Chronic liver disease and cirrhosis	37	1.2	47	1.4	55	2.1	54	2.1	57	1.6	58	1.6
10	Influenza and pneumonia	33	1.1	52	1.6	39	1.5	49	1.9	60	1.7	57	1.6
11	Essential (primary) hypertension and hypertensive renal disease	50	1.6	38	1.2	36	1.4	34	1.3	41	1.1	32	0.9
12	Parkinson's disease	30	1.0	53	1.6	14	0.5	19	0.7	33	0.9	53	1.5
13	Nephritis, nephrotic syndrome and nephrosis	25	0.8	28	0.8511	31	1.2	36	1.4	31	0.9	37	1.0
14	Certain conditions originating in the perinatal period	17	0.5	18	0.5	23	0.9	32	1.2	13	0.4	23	0.6
15	Assault (homicide)	11	0.4	9	0.3	38	1.4	22	0.8	20	0.6	9	0.3
	All Other Causes	453	14.4	527	16.0	496	18.6	427	16.3	566	15.8	542	15.2
	TOTAL DEATHS:	3,142	100.0	3,290	100.0	2,664	100.0	2,620	100.0	3,580	100.0	3,569	100.0

^a Rank is based on total number of deaths in each of the National Center for Health Statistics (NCHS) "rankable" categories. The top 15 leading causes of death presented here are based on the county-wide rank among San Diego residents in 2006.

^b Cause of death is based on the underlying cause of death reported on death certificates as classified by ICD-10 codes.

[†]HHSA Regions were created by grouping contiguous zip codes.

Source: California Department of Public Health, Center for Health Statistics, Death Statistical Master Files; SANDAG January 1 population estimates (2005-07 estimates released 2008)

Prepared by County of San Diego, Health & Human Services Agency, Public Health Services, Community Epidemiology Branch, 03/11/2009

LEADING CAUSES OF DEATH AMONG SAN DIEGO COUNTY RESIDENTS BY HHSA REGION†, 2007

Age-adjusted Rates

COUNTY- WIDE RANK in 2007 ^a	CAUSE OF DEATH ^b	AGE-ADJUSTED RATES ^c						
		REGION [†]						SAN DIEGO COUNTY
		N. Coastal	N. Central	Central	South	East	N. Inland	
1	Malignant neoplasms (all cancers)	157.5	142.5	172.3	156.5	184.0	162.5	162.6
2	Diseases of heart	140.5	122.1	177.1	177.7	186.5	124.0	151.9
3	Cerebrovascular diseases	34.1	28.5	40.8	39.5	40.6	33.8	36.1
4	Chronic lower respiratory diseases	34.8	23.7	32.5	30.8	53.4	31.3	34.1
5	Alzheimer's disease	28.6	34.2	20.6	20.7	40.1	36.7	31.3
6	Accidents (unintentional injuries)	29.3	24.9	31.7	27.4	32.2	31.4	31.4
7	Diabetes mellitus	13.2	12.1	22.5	25.2	24.7	12.2	17.5
8	Intentional self-harm (suicide)	11.0	9.6	11.8	7.0	16.3	10.6	11.5
9	Chronic liver disease and cirrhosis	6.9	7.7	12.8	13.3	11.8	10.1	10.4
10	Influenza and pneumonia	5.5	7.8	10.3	12.2	11.9	8.2	9.0
11	Essential (primary) hypertension and hypertensive renal disease	9.0	5.7	9.7	8.6	8.3	4.7	7.4
12	Parkinson's disease	5.4	8.4	4.1	4.8	6.8	7.7	6.5
13	Nephritis, nephrotic syndrome and nephrosis	4.3	4.5	8.7	9.0	6.6	6.1	6.3
14	Certain conditions originating in the perinatal period	2.8	3.3	4.1	5.3	2.9	4.0	3.8
15	Assault (homicide)	2.2	1.5	7.2	4.7	4.3	1.7	3.8
	All Other Causes							
	TOTAL DEATHS:		520.7	690.0	646.5	747.9	571.9	623.2

^a Rank is based on total number of deaths in each of the National Center for Health Statistics (NCHS) "rankable" categories. The top 15 leading causes of death presented here are based on the county-wide rank among San Diego residents in 2006.

^b Cause of death is based on the underlying cause of death reported on death certificates as classified by ICD-10 codes.

[†] HHSA Regions were created by grouping contiguous zip codes.

* Rate not calculated for fewer than 20 deaths in this category.

[†] HHSA Regions were created by grouping contiguous zip codes.

Source: California Department of Public Health, Center for Health Statistics, Death Statistical Master Files; SANDAG January 1 population estimates (2005-07 estimates released 2008)

Prepared by County of San Diego, Health & Human Services Agency, Public Health Services, Community Epidemiology Branch, 08/08/2008

LEADING CAUSES OF DEATH IN EACH HHSA REGION[†], SAN DIEGO COUNTY, 2007
Number and Percent of Deaths, Crude Rates and Age-adjusted Rates

Table 1. North Coastal Region

Rank ^a	Cause of Death ^b	Number of Deaths	%	Crude Rate ^c	Age-adjusted Rate ^c
1	Malignant neoplasms (all cancers)	831	26.4	155.7	157.5
2	Diseases of heart	801	25.5	150.1	140.5
3	Cerebrovascular diseases	195	6.2	36.5	34.1
4	Chronic lower respiratory diseases	193	6.1	36.2	34.8
5	Alzheimer's disease	173	5.5	32.4	28.6
6	Accidents (unintentional injuries)	163	5.2	30.5	29.3
7	Diabetes mellitus	71	2.3	13.3	13.2
8	Intentional self-harm (suicide)	59	1.9	11.1	11.0
9	Essential (primary) hypertension and hypertensive renal disease	50	1.6	9.4	9.0
10	Chronic liver disease and cirrhosis	37	1.2	6.9	6.9
	All other causes	569	18.1		
	TOTAL DEATHS	3,142	100.0	588.6	566.2

Table 2. North Central Region

Rank ^a	Cause of Death ^b	Number of Deaths	%	Crude Rate ^c	Age-adjusted Rate ^c
1	Malignant neoplasms (all cancers)	872	26.5	148.1	142.5
2	Diseases of heart	790	24.0	134.1	122.1
3	Alzheimer's disease	229	7.0	38.9	34.2
4	Cerebrovascular diseases	185	5.6	31.4	28.5
5	Accidents (unintentional injuries)	158	4.8	26.8	24.9
6	Chronic lower respiratory diseases	150	4.6	25.5	23.7
7	Diabetes mellitus	74	2.2	12.6	12.1
8	Intentional self-harm (suicide)	60	1.8	10.2	9.6
9	Parkinson's disease	53	1.6	9.0	8.4
10	Influenza and pneumonia	52	1.6	8.8	7.8
	All other causes	667	20.3		
	TOTAL DEATHS	3,290	100.0	558.6	520.7

Table 3. Central Region

Rank ^a	Cause of Death ^b	Number of Deaths	%	Crude Rate ^c	Age-adjusted Rate ^c
1	Diseases of heart	663	24.9	132.6	177.1
2	Malignant neoplasms (all cancers)	637	23.9	127.4	172.3
3	Cerebrovascular diseases	151	5.7	30.2	40.8
4	Accidents (unintentional injuries)	148	5.6	29.6	31.7
5	Chronic lower respiratory diseases	117	4.4	23.4	32.5
6	Diabetes mellitus	84	3.2	16.8	22.5
7	Alzheimer's disease	76	2.9	15.2	20.6
8	Intentional self-harm (suicide)	56	2.1	11.2	11.8
9	Chronic liver disease and cirrhosis	55	2.1	11.0	12.8
10	Human immunodeficiency virus (HIV) disease	43	1.6	8.6	9.5
	All other causes	634	23.8		
	TOTAL DEATHS	2,664	100.0	532.7	690.0

^a Rank is based on total number of deaths in each of the National Center for Health Statistics (NCHS) "rankable" categories.

^b Cause of death is based on the underlying cause of death reported on death certificates as classified by ICD-10 codes.

^c All rates are per 100,000 population; age-adjusted rates are adjusted to 2000 U.S. Standard Population.

[†] HHSA Regions were created by grouping contiguous zip codes.

Source: California Department of Public Health, Center for Health Statistics, Death Statistical Master Files;

SANDAG January 1 population estimates (2005-07 estimates released. 2008)

Prepared by County of San Diego, Health & Human Services Agency, Public Health Services, Community Epidemiology Branch, 03/11/2009

LEADING CAUSES OF DEATH IN EACH HHSA REGION[†], SAN DIEGO COUNTY, 2007
Number and Percent of Deaths, Crude Rates and Age-adjusted Rates

Table 4. South Region

Rank ^a	Cause of Death ^b	Number of Deaths	%	Crude Rate ^c	Age-adjusted Rate ^c
1	Diseases of heart	711	27.1	155.7	177.7
2	Malignant neoplasms (all cancers)	624	23.8	136.6	156.5
3	Cerebrovascular diseases	157	6.0	34.4	39.5
4	Chronic lower respiratory diseases	121	4.6	26.5	30.8
5	Accidents (unintentional injuries)	121	4.6	26.5	27.4
6	Diabetes mellitus	99	3.8	21.7	25.2
7	Alzheimer's disease	83	3.2	18.2	20.7
8	Chronic liver disease and cirrhosis	54	2.1	11.8	13.3
9	Influenza and pneumonia	49	1.9	10.7	12.2
10	Nephritis, nephrotic syndrome and nephrosis	36	1.4	7.9	9.0
	All other causes	565	21.6		
	TOTAL DEATHS	2,620	100.0	573.6	646.5

Table 5. East Region

Rank ^a	Cause of Death ^b	Number of Deaths	%	Crude Rate ^c	Age-adjusted Rate ^c
1	Diseases of heart	903	25.2	195.9	186.5
2	Malignant neoplasms (all cancers)	859	24.0	186.4	184.0
3	Chronic lower respiratory diseases	247	6.9	53.6	53.4
4	Alzheimer's disease	203	5.7	44.0	40.1
5	Cerebrovascular diseases	199	5.6	43.2	40.6
6	Accidents (unintentional injuries)	155	4.3	33.6	32.2
7	Diabetes mellitus	115	3.2	25.0	24.7
8	Intentional self-harm (suicide)	78	2.2	16.9	16.3
9	Influenza and pneumonia	60	1.7	13.0	11.9
10	Chronic liver disease and cirrhosis	57	1.6	12.4	11.8
	All other causes	704	19.7		
	TOTAL DEATHS	3,580	100.0	776.7	747.9

Table 6. North Inland Region

Rank ^a	Cause of Death ^b	Number of Deaths	%	Crude Rate ^c	Age-adjusted Rate ^c
1	Malignant neoplasms (all cancers)	953	26.7	170.3	162.5
2	Diseases of heart	821	23.0	146.7	124.0
3	Alzheimer's disease	252	7.1	45.0	36.7
4	Cerebrovascular diseases	220	6.2	39.3	33.8
5	Chronic lower respiratory diseases	191	5.4	34.1	31.3
6	Accidents (unintentional injuries)	186	5.2	33.2	31.4
7	Diabetes mellitus	74	2.1	13.2	12.2
8	Intentional self-harm (suicide)	61	1.7	10.9	10.6
9	Chronic liver disease and cirrhosis	58	1.6	10.4	10.1
10	Influenza and pneumonia	57	1.6	10.2	8.2
	All other causes	696	19.5		
	TOTAL DEATHS	3,569	100.0	637.7	571.9

^a Rank is based on total number of deaths in each of the National Center for Health Statistics (NCHS) "rankable" categories.

^b Cause of death is based on the underlying cause of death reported on death certificates as classified by ICD-10 codes.

^c All rates are per 100,000 population; age-adjusted rates are adjusted to 2000 U.S. Standard Population.

[†] HHSA Regions were created by grouping contiguous zip codes.

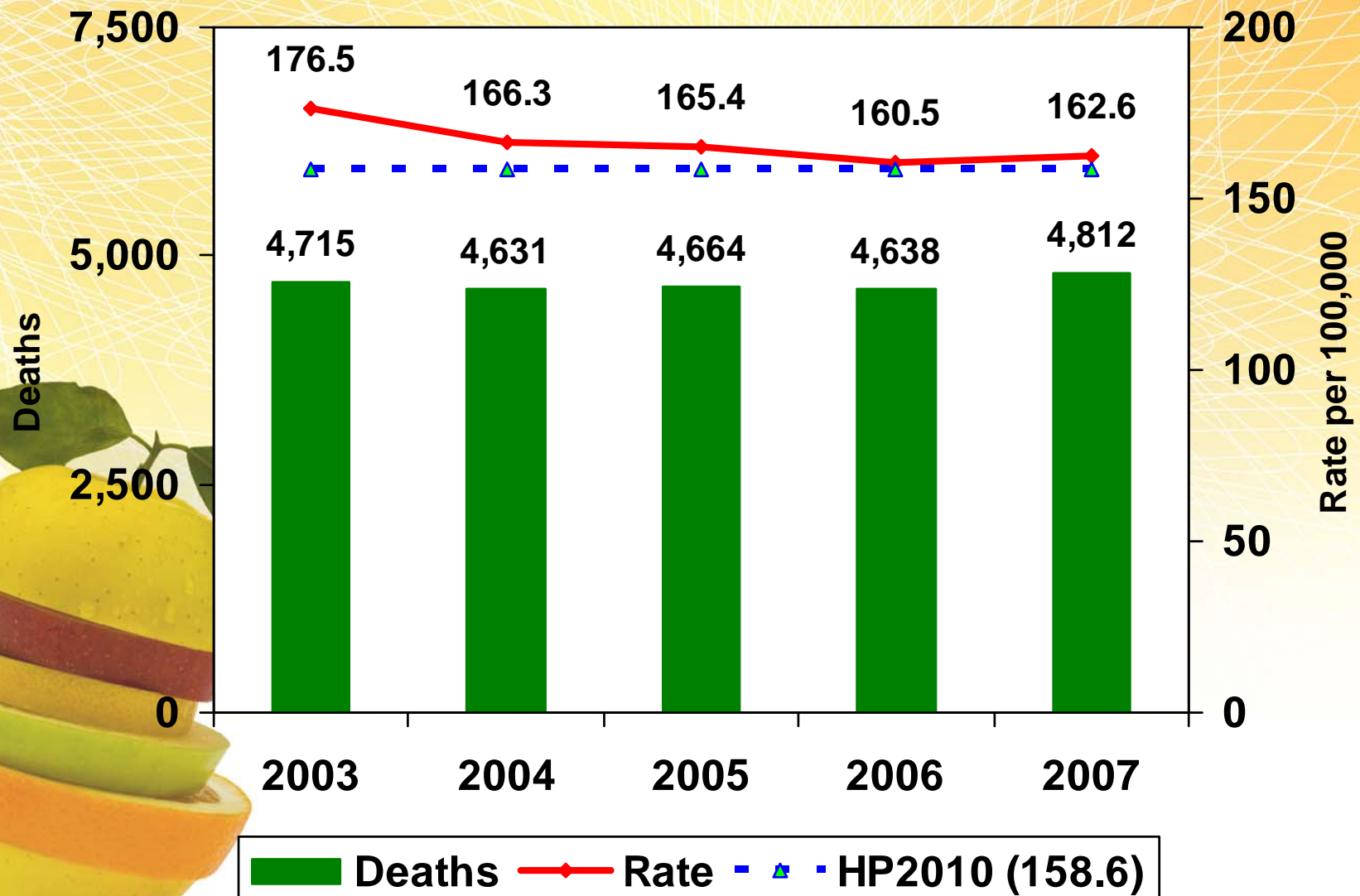
Source: California Department of Public Health, Center for Health Statistics, Death Statistical Master Files;

SANDAG January 1 population estimates (2005-07 estimates released 2008)

Prepared by County of San Diego, Health & Human Services Agency, Public Health Services, Community Epidemiology Branch, 03/11/2009

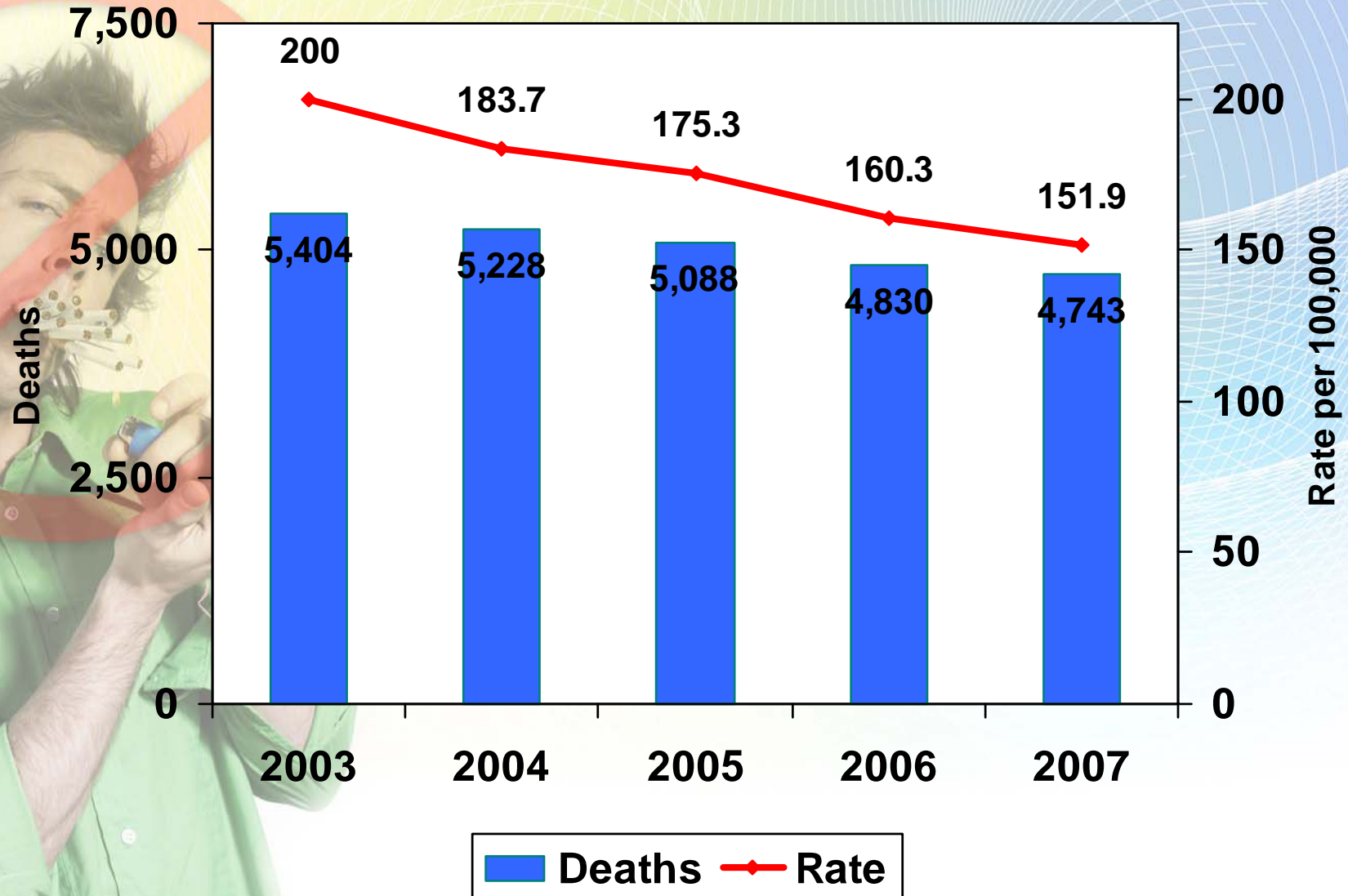
CANCER DEATHS

Number and Age-adjusted Rates



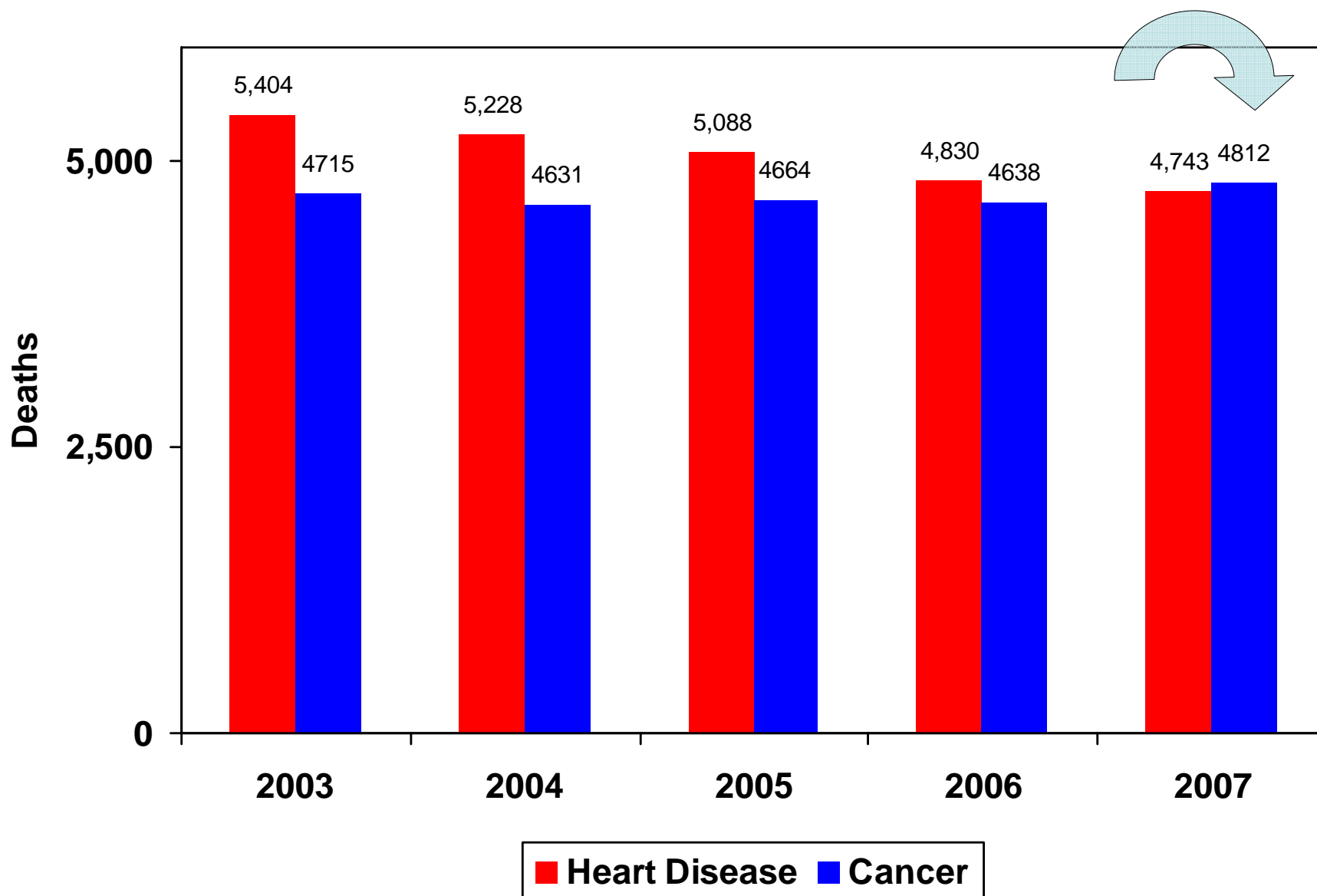
HEART DISEASE DEATHS

Number and Age-adjusted Rates



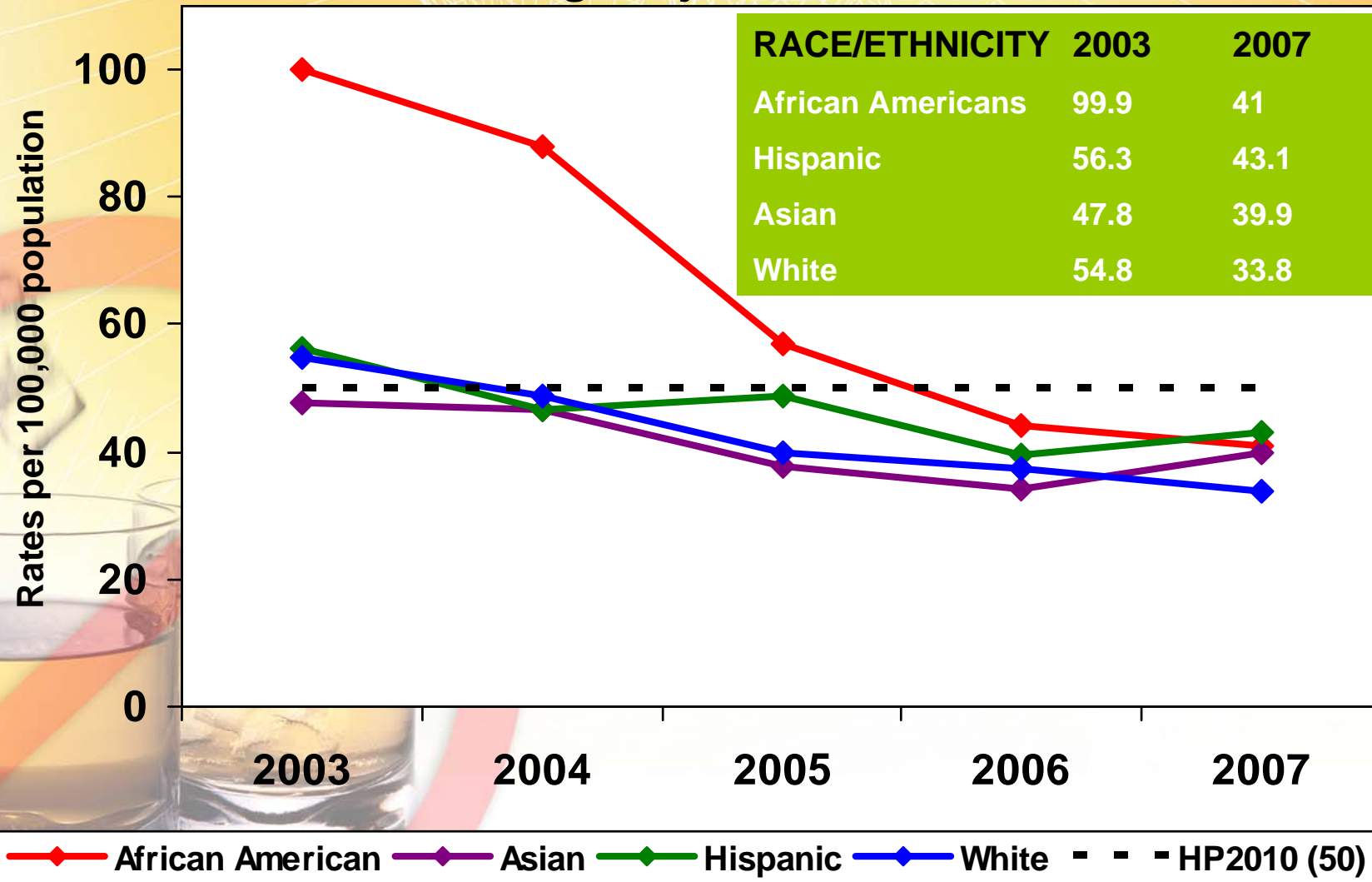
Heart Disease vs Cancer Deaths

Among San Diego County Residents, 2003-2007

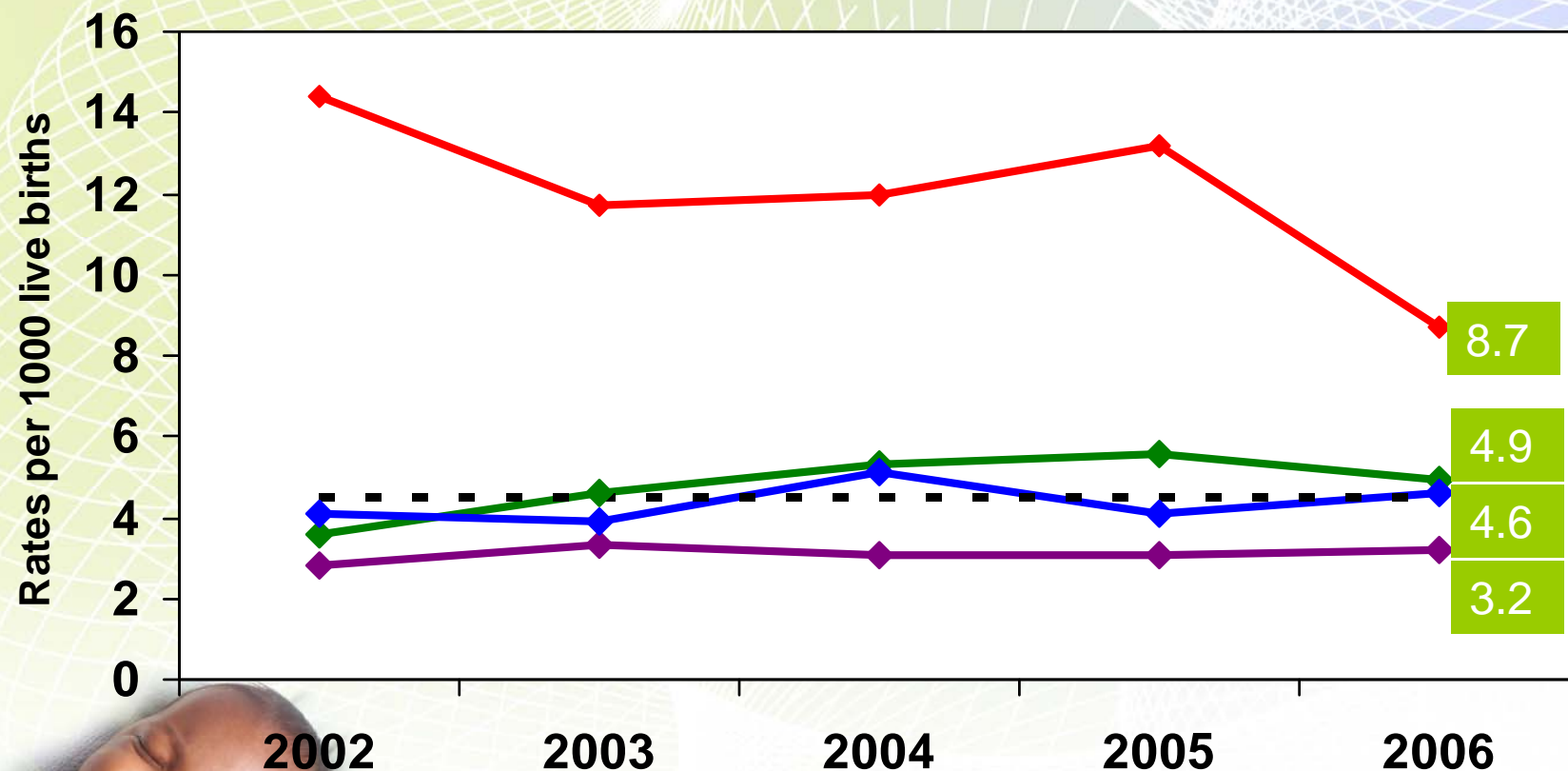


STROKE DEATHS

Age-adjusted Rates



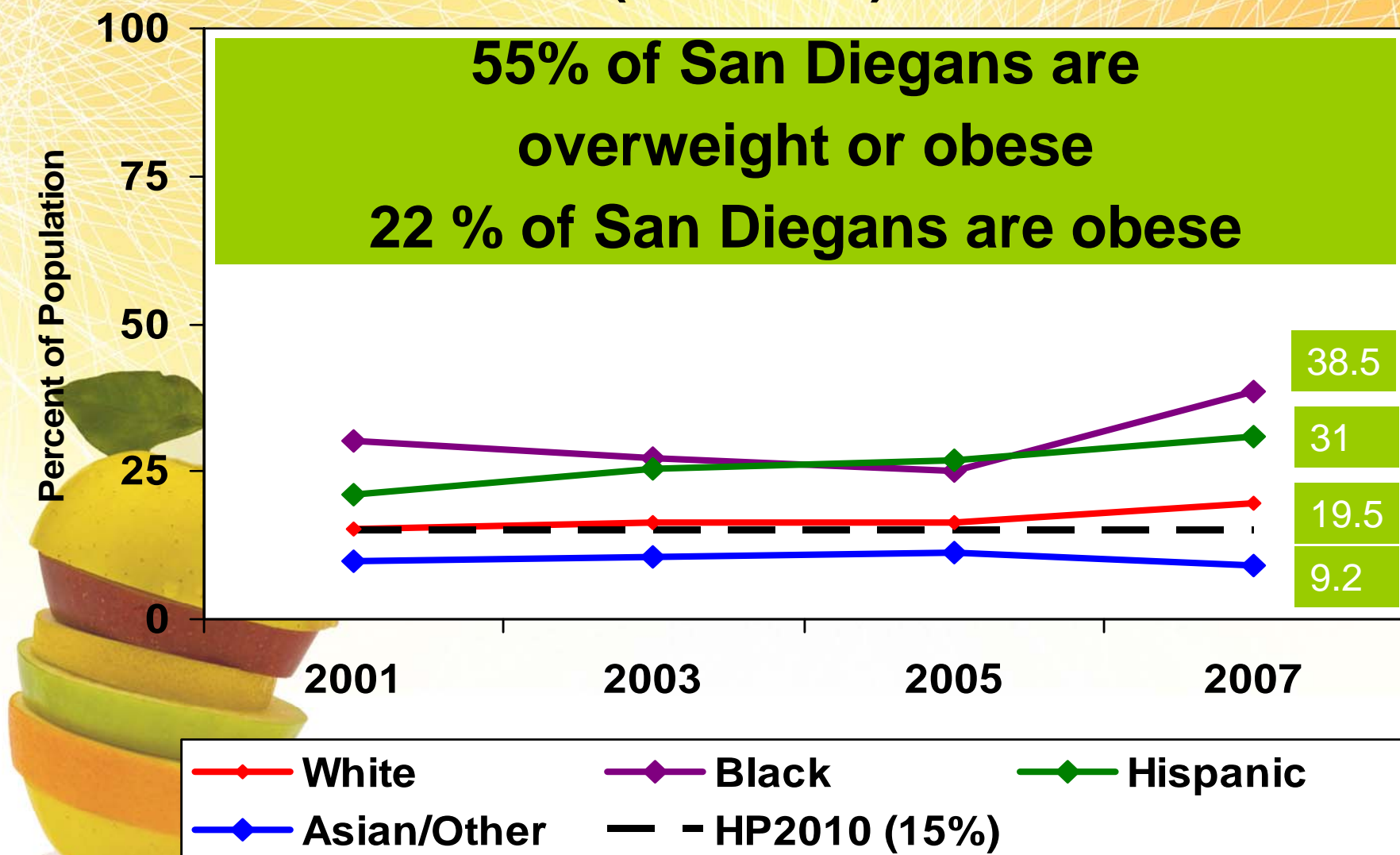
INFANT MORTALITY



—◆— African American —◆— Asian
—◆— Hispanic —◆— White
- - - HP2010 (4.5)

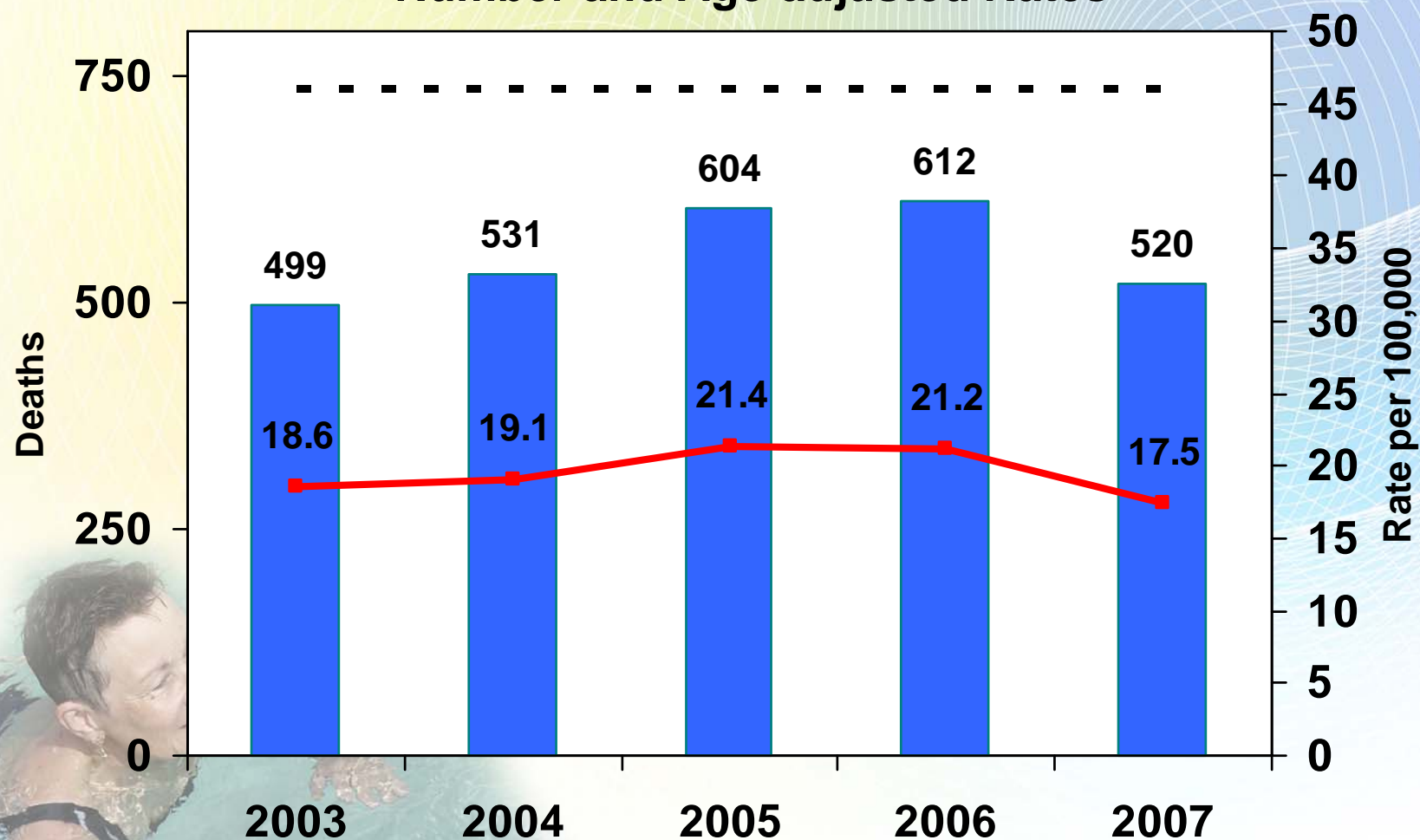
OBESSE ADULTS

(BMI > 30)



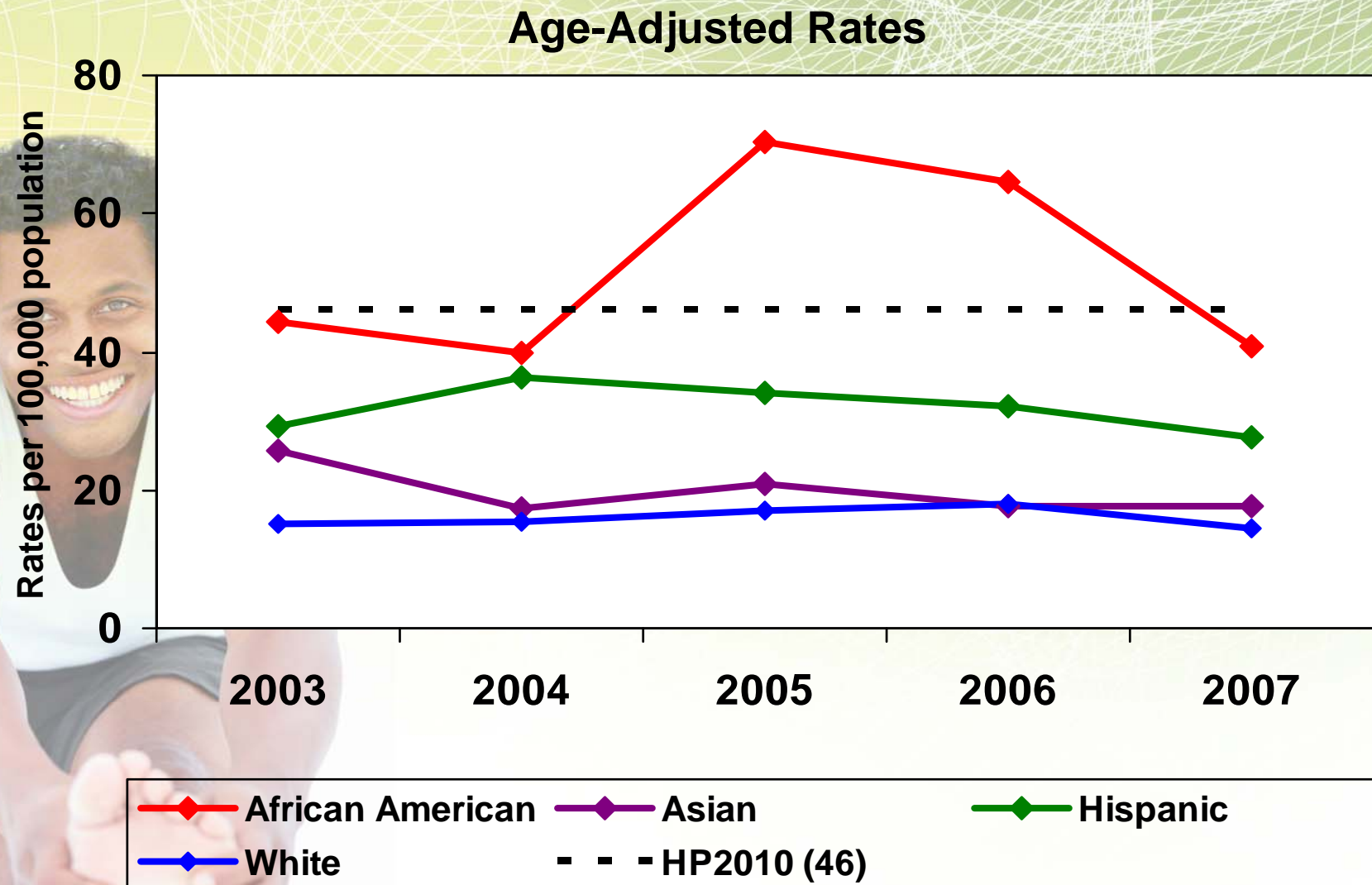
DIABETES DEATHS

Number and Age-adjusted Rates



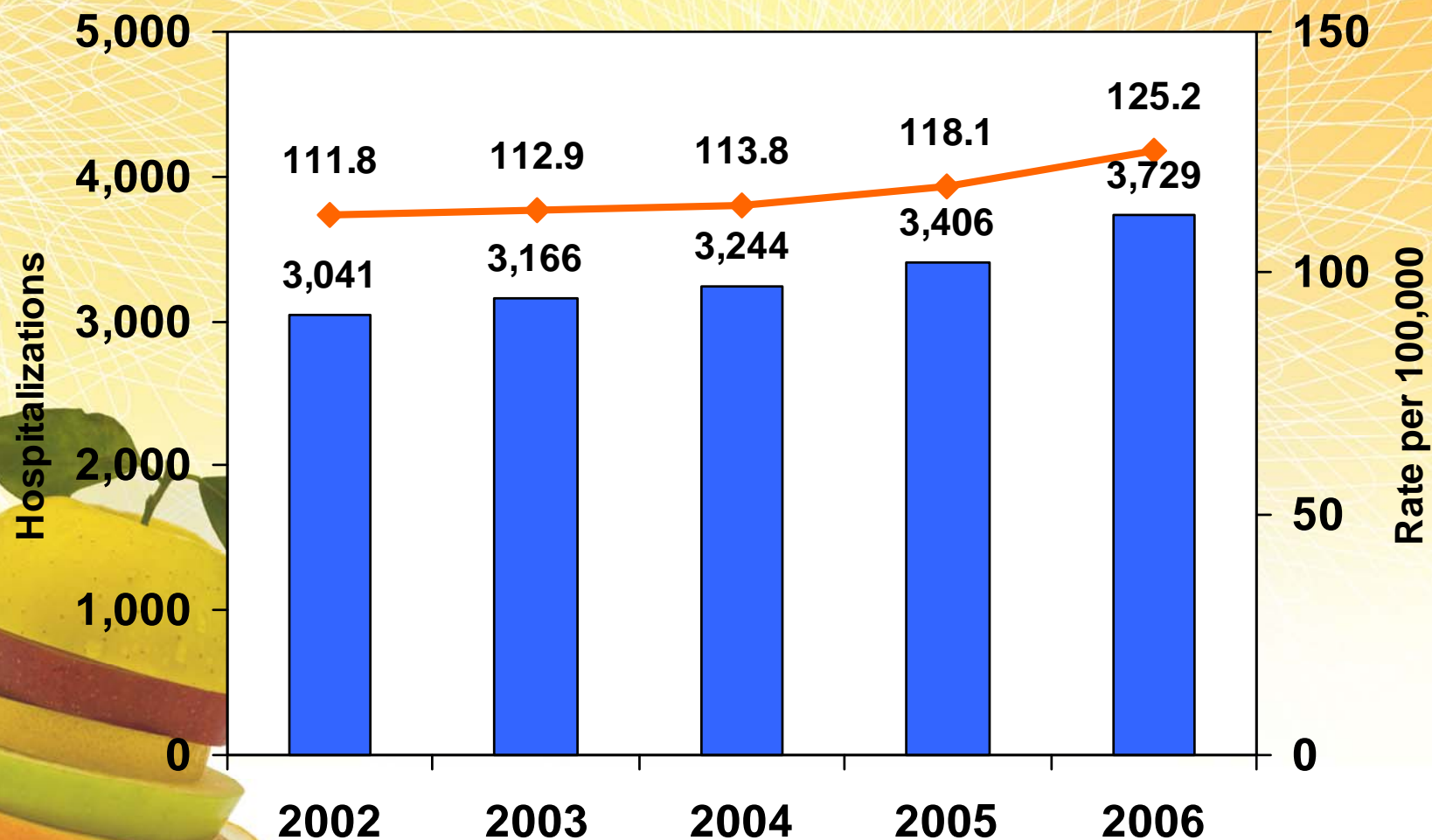
Deaths Rate HP2010 (46)

DIABETES DEATHS BY RACE/ETHNICITY



DIABETES HOSPITALIZATIONS

Number and Age-adjusted Rates



■ Hospitalizations ◆ Rate



County of San Diego Health and Human Services Agency

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